

DC #6



PCT

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/869,445

DATE: 12/16/2002

TIME: 15:17:56

Input Set : D:\46433-20002.txt

Output Set: N:\CRF4\12162002\I869445.raw

4 <110> APPLICANT: GENWAY BIOTECH, INC.
 5 Duan, Lingxun
 7 <120> TITLE OF INVENTION: PRODUCTION OF RECOMBINANT MONELLIN USING
 8 METHYLOTROPHIC YEAST EXPRESSION SYSTEM
 11 <130> FILE REFERENCE: 46433-20002.00
 13 <140> CURRENT APPLICATION NUMBER: 09/869,445
 C--> 14 <141> **CURRENT FILING DATE: 2002-05-29**
 16 <150> PRIOR APPLICATION NUMBER: US 60/114,529
 17 <151> PRIOR FILING DATE: 1998-12-31
 19 <160> NUMBER OF SEQ ID NOS: 14
 21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 12
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Artificial Sequence
 28 <220> FEATURE:
 29 <223> OTHER INFORMATION: Peptidyl fragment of the chimeric protein
 31 <400> SEQUENCE: 1
 32 Gly Gly Ser Gly Gly Ser Gly Gly Gly Ser
 33 1 5 10
 35 <210> SEQ ID NO: 2
 36 <211> LENGTH: 4
 37 <212> TYPE: PRT
 38 <213> ORGANISM: Artificial Sequence
 40 <220> FEATURE:
 41 <223> OTHER INFORMATION: Peptidyl fragment of the chimeric protein
 43 <400> SEQUENCE: 2
 44 Gly Gly Gly Ser
 45 1
 47 <210> SEQ ID NO: 3
 48 <211> LENGTH: 30
 49 <212> TYPE: PRT
 50 <213> ORGANISM: Saccharomyces cerevisiae
 52 <400> SEQUENCE: 3
 53 Met Leu Leu Phe Ile Asn Thr Thr Ile Ala Ser Ile Ala Ala Lys Glu
 54 1 5 10 15
 55 Glu Gly Val Ser Leu Glu Lys Arg Glu Ala Glu Ala Glu Phe
 56 20 25 30
 58 <210> SEQ ID NO: 4
 59 <211> LENGTH: 19
 60 <212> TYPE: DNA
 61 <213> ORGANISM: Artificial Sequence
 63 <220> FEATURE:

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/869,445

DATE: 12/16/2002

TIME: 15:17:56

Input Set : D:\46433-20002.txt

Output Set: N:\CRF4\12162002\I869445.raw

```

64 <223> OTHER INFORMATION: alpha-factor
66 <400> SEQUENCE: 4
67 ctattgccag cattgctgc 19
69 <210> SEQ ID NO: 5
70 <211> LENGTH: 96
71 <212> TYPE: PRT
72 <213> ORGANISM: Pichia pastoris
74 <400> SEQUENCE: 5
75 Gly Gly Trp Glu Ile Ile Asp Ile Gly Pro Phe Thr Gln Asn Leu Gly
76 1 5 10 15
77 Lys Phe Ala Val Asp Glu Glu Asn Lys Ile Gly Gln Tyr Gly Arg Leu
78 20 25 30
79 Thr Phe Asn Lys Val Ile Arg Pro Cys Met Lys Lys Thr Ile Tyr Glu
80 35 40 45
81 Asn Glu Gly Ser Arg Glu Ile Lys Gly Tyr Glu Tyr Gln Leu Tyr Val
82 50 55 60
83 Tyr Ala Ser Asp Lys Leu Phe Arg Ala Asp Ile Ser Glu Asp Tyr Lys
84 65 70 75 80
85 Thr Arg Gly Arg Lys Leu Leu Arg Phe Asn Gly Pro Val Pro Pro Pro
86 85 90 95
88 <210> SEQ ID NO: 6
89 <211> LENGTH: 291
90 <212> TYPE: DNA
91 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Oligos used for synthesis of the recombinant
95 single-chain monellin protein
97 <400> SEQUENCE: 6
98 ggtgagtggg agattattga cattggtcca ttactcaaaa acttgggtaa gttcgctgtt 60
99 gacgaggaga acaagattgg tcaatacggg agattgactt tcaacaagggt tattagacca 120
100 tgatatgaaga agactattta cgagaacgag ggttctagag agattaagggt ttacgagtac 180
101 caattgtacg ttacgccttc tgacaagttg ttccgtgctg acatttctga ggactacaag 240
102 actcgtgggtc gtaagttggt gagattcaac ggtccagttc caccaccata a 291
104 <210> SEQ ID NO: 7
105 <211> LENGTH: 53
106 <212> TYPE: DNA
107 <213> ORGANISM: Artificial Sequence
109 <220> FEATURE:
110 <223> OTHER INFORMATION: Oligonucleotide in location M1 in the synthesized
111 monellin DNA
113 <400> SEQUENCE: 7
114 agaattcggg gagtggggaga ttattgacat tgggccattc actcaaaaact tgg 53
116 <210> SEQ ID NO: 8
117 <211> LENGTH: 55
118 <212> TYPE: DNA
119 <213> ORGANISM: Artificial Sequence
121 <220> FEATURE:
122 <223> OTHER INFORMATION: Oligonucleotide in location M2 in the synthesized
123 monellin DNA

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/869,445

DATE: 12/16/2002

TIME: 15:17:56

Input Set : D:\46433-20002.txt

Output Set: N:\CRF4\12162002\I869445.raw

```

125 <400> SEQUENCE: 8
126 gaacaagatt ggtcaatacg gtagattgac tttcaacaag tttattaggc catgt      55
128 <210> SEQ ID NO: 9
129 <211> LENGTH: 59
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: Oligonucleotide in location M3 in the synthesized
135     monellin DNA
137 <400> SEQUENCE: 9
138 gagaccgagg gttctagaga gattaagggt tacgagtacc aattgtacgt ttacgcttc      59
140 <210> SEQ ID NO: 10
141 <211> LENGTH: 53
142 <212> TYPE: DNA
143 <213> ORGANISM: Artificial Sequence
145 <220> FEATURE:
146 <223> OTHER INFORMATION: Oligonucleotide in location M4
147     in the synthesized monellin DNA
149 <400> SEQUENCE: 10
150 gtgctgacat tcctgaggac tacaagactc gtggtcgtaa gttgttgaga ttc      53
152 <210> SEQ ID NO: 11
153 <211> LENGTH: 59
154 <212> TYPE: DNA
155 <213> ORGANISM: Artificial Sequence
157 <220> FEATURE:
158 <223> OTHER INFORMATION: Oligonucleotide in location N1 in the synthesized
159     monellin DNA
161 <400> SEQUENCE: 11
162 gtattgacca atcttggttct cctcgtcaac agcgaactta cccaagtttt gagtgaatg      59
164 <210> SEQ ID NO: 12
165 <211> LENGTH: 56
166 <212> TYPE: DNA
167 <213> ORGANISM: Artificial Sequence
169 <220> FEATURE:
170 <223> OTHER INFORMATION: Oligonucleotide in location N2 in the synthesized
171     monellin DNA
173 <400> SEQUENCE: 12
174 ctctagaacc ctcgttctcg taaatagtct tcttcataca tgggtctaata accttg      56
176 <210> SEQ ID NO: 13
177 <211> LENGTH: 54
178 <212> TYPE: DNA
179 <213> ORGANISM: Artificial Sequence
181 <220> FEATURE:
182 <223> OTHER INFORMATION: Oligonucleotide in location N3 in the synthesized
183     monellin DNA
185 <400> SEQUENCE: 13
186 gtcctcagaa atgtcagcac ggaacaactt gtcagaagcg taaacgtaca attg      54
188 <210> SEQ ID NO: 14
189 <211> LENGTH: 51

```

RAW SEQUENCE LISTINGPATENT APPLICATION: **US/09/869,445**

DATE: 12/16/2002

TIME: 15:17:56

Input Set : **D:\46433-20002.txt**Output Set: **N:\CRF4\12162002\I869445.raw**

190 <212> TYPE: DNA
191 <213> ORGANISM: Artificial Sequence
193 <220> FEATURE:
194 <223> OTHER INFORMATION: Oligonucleotide in location N4 in the synthesized
195 monellin DNA
197 <400> SEQUENCE: 14
198 agaattctta tgggtggtgga actggaccgt tgaatctcaa caacttacga c 51

VERIFICATION SUMMARY

PATENT APPLICATION: **US/09/869,445**

DATE: 12/16/2002

TIME: 15:17:57

Input Set : **D:\46433-20002.txt**

Output Set: **N:\CRF4\12162002\I869445.raw**

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date